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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------|------------------|
| 10/708,915   | 03/31/2004  | Aidas Gimbutas       | 01697-00011-US          | 2914             |
| 23416 7590 01/17/2007<br>CONNOLLY BOVE LODGE & HUTZ, LLP<br>P O BOX 2207<br>WILMINGTON, DE 19899 |             |                      | EXAMINER<br>SIM, YONG H |                  |
|  |             |                      | ART UNIT                | PAPER NUMBER     |
|  |             |                      | 2629                    |                  |
| SHORTENED STATUTORY PERIOD OF RESPONSE   |             | MAIL DATE            | DELIVERY MODE           |                  |
| 3 MONTHS   |             | 01/17/2007           | PAPER                   |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/708,915

Applicant(s)

GIMBUTAS, AIDAS

Examiner

Yong Sim

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 3, 15 - 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/4/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 3 is objected to because of the following informalities: Please insert a space between “isprogrammably” to read “is programmably”. Appropriate correction is required.
2. Claims 15 – 18 are objected to because of the following informalities: The method claims 15 – 18 are dependent claims of claim 13. However, claim 13 is not a method claim. Please change “claim 13” in claims 15 – 18 to read as “claim 14.” Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claim 1, 8 – 10, 12 and 18 - 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yuhara (US 6,362,801).**

Re claim 1, Yuhara teaches an LED curtain/flexible net display system, comprising: a) a non-rigid curtain (30, Fig. 4, Col. 1, lines 55 – 60; “The display screen can be installed in arbitrary manners in accordance with the conditions of the installation

place.” Col. 2, lines 10 – 15; “Owing to the flexibility of the flexible net, the display screen of the display apparatus can be changed in posture in an arbitrary manner.”; The definition of a curtain is a hanging screen usually capable of being drawn back or up. The flexible net is capable of being drawn back or up due to it inherent physical nature, and can be installed in arbitrary manners which would including hanging, therefore it is construed as being a non-rigid curtain) having a display side (Col. 2, lines 48 – 50; “a flexible net member constitutes a display screen area.”) and a reverse side and defining one or more holes substantially therethrough and arranged in a desired display pattern (See Fig. 4); b) one or more washers each defining a central opening (41, Fig. 5 shows plates with a central opening. A washer is a perforated plate.), said washers fastened to said reverse side of said curtain (Fig. 5 shows the plates on both display and reverse side of the net/curtain), with the central openings (44, Fig. 5) of said washers substantially aligned with the holes in said curtain in one to one relation (See fig. 5); and c) one or more LED lighting units contained in an LED light string (Fig. 3, notice the LED’s lined as strings), each of said LED lighting units inserted through the central opening of a respective washer to form a visible display pattern on the display side of the curtain when said LED lighting units are activated (Fig. 4).

Re claim 8, Yuhara discloses the LED curtain display system of claim 1, wherein the curtain is formed of a material selected from the group consisting of: cotton, polyester, denim, polyester blends, and cotton blends (Col. 5, lines 8 – 9; “formed of flexible synthetic resin.” Polyester is any of numerous synthetic resins.).

Re claim 9, Yuhara discloses the LED curtain display system of claim 1, wherein the curtain is formed from two or more panels joined together (Col. 4, lines 15 – 19; “three independent units are assembled as one.”).

Re claim 10, Yuhara discloses the LED curtain display system of claim 1 wherein the LED light units are present in a plurality and are arranged in substantially parallel rows and columns to form a matrix (See Fig. 4).

Re claim 12, Yuhara discloses the LED curtain display system of claim 1, wherein at least one of the LED lighting units has an associated a dome lens that extends through the respective hole in the curtain (See Fig. 5).

Claims 18 and 19 are corresponding method claims of claim 1 and 10 respectively. Yuhara discloses device, system and method of making. Therefore, claim 18 and 19 have been analyzed and rejected w/r to claim 1 and 10.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara (US 6,362,801 B1) in view of Yoksza et al. (US 5,410,328).**

Re claim 2, Yuhara discloses the LED curtain display system of claim 1, but does not explicitly disclose further comprising a cable connector affixed to said curtain and located at one end of the curtain running vertically, wherein said cable connector joins said LED light strings together. However, Yoksza et al. disclose a large scale LED display with an input board (connects the ribbon cable 110, Fig. 3) which is at an end of

a row that supplies data and power to a row of LED modules (Col. 4, lines 38 – 42, Fig.

8. Also see Electrical Jack (Connector/male) 42, Fig. 4)).

Therefore, taking the combined teachings of Yuhara and Yoksza et al., as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the large scale LED display with an input board (Yoksza: Fig. 8) as taught by Yoksza et al. to the LED curtain display (Yuhara: Fig. 4) of Yoksza to obtain an LED curtain display systems which comprises an input board to provide data, power and commands for a row of LED modules (Col. 4, lines 38 – 42).

**4. Claims 3, 4, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara (US 6,362,801 B1) in view of Yoksza et al. (US 5,410,328), and further in view of Lys et al. (US 6,528,954).**

Re claim 3, Yuhara and Yoksza et al. as a whole teaches the LED curtain display system of claim 2, where in said LED light string is programmably connected to a computer (Yuhara: 2, Fig. 3. Also see Col. 6, lines 23 – 30), but fail to disclose an Ethernet connection. However, Lys et al. teaches an LED system which is connected to a PC by Ethernet (Col. 24, lines 30 – 34).

Therefore, taking the combined teachings of Yuhara, Yoksza et al. and Lys et al. as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the LED system which uses Ethernet as taught by Lys et al. into the LED

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curtain display system of claim 2 as taught by Yuhara and Yoksza to obtain an LED system which could communicate through a network using Ethernet to be controlled by a computer (Col. 24, lines 30 – 34).

Claim 4 recites most of the limitations that have been covered in claim 3.

Therefore, it has been analyzed and rejected w/r to claim 3. With respect to said means for hanging the curtain, see Yuhara: Col. 1 lines 55 – 60. The screen can be installed in arbitrary manners in accordance with the conditions of the installation place. The holes of the net can be used to hang the display screen.

Re claim 11, Yuhara, Yoksza et al. and Lys et al. as a whole teach The LED curtain display system of claim 3 wherein the LED display is programmably controllable to vary the colors emitted by each individual LED lighting unit over time (Col. 6, lines 24-55; "If the image data are still-image data, they are written in accordance with the required display time.").

Claim 14 is a corresponding method claim of claim 3. Yuhara, Yoksza, and Lys et al disclose device, system and method of making. Therefore, claim 14 has been analyzed and rejected w/r to claim 3.



Claims 18 and 19 are corresponding method claims of claim 1, 3 and 10. Yuhara discloses device, system and method of making. Therefore, claim 18 and 19 have been analyzed and rejected w/r to claim 1, 3 and 10.

**5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara (US 6,362,801 B1) in view of Gimbutas et al. (US 5,066,085)**

Re claim 13, Yuhara discloses The LED curtain display system of claim 1, but does not disclose one or more fiber optic strands each having a proximal end and a distal end, wherein the distal ends of said fiber optic strands are affixed to the curtain and the proximal ends of said fiber optic strands are affixed to a light source. However, Gimbutas et al, disclose a fiber optic curtain with one or more fiber optic strands each having a proximal end and a distal end, wherein the distal ends of said fiber optic strands are affixed to the curtain and the proximal ends of said fiber optic strands are affixed to a light source (Gimbutas: Fig. 1).

Therefore, taking the combined teachings of Yuhara and Gimbutas et al. as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the fiber optic curtain Gimbutas et al. into the LED curtain display system of claim 1 as taught by Yuhara to obtain a fiber optic curtain system with LED's to be used as a backdrop for theatrical events. (Col. 1, lines 13 - 17).

**6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara (US 6,362,801 B1) in view of Breslow. (US 3,118,207)**

Re claim 5, Yuhara discloses the LED curtain display system of claim 1, but fails to disclose the washers that are fastened to the reverse side of the curtain with adhesive. However, Breslow teaches a shower curtain with washers (10, Fig. 1) fastened with adhesive (Col. 1, lines 68 – 72; “pads can be secured by a layer of thermally sensitive adhesive on the back.”).

Therefore, taking the combined teachings of Yuhara and Breslow as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the washers with adhesive of Breslow into the LED curtain display system of claim 1 as taught by Yuhara to obtain a LED curtain system with washers attached to the curtain by adhesive to provide hanger elements which would be securely placed by the adhesive (Col. 1, lines 64 - 72).

**7. Claim 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over combined teachings of Yuhara (US 6,362,801 B1), Yoksza et al. (US 5,410,328), and Lys et al. (US 6,528,954), in view of Breslow (US 3,118,207).**

Re claim 15, the combined teachings of Yuhara, Yoksza and Lys et al. as a whole teach the method of claim 13, but fail to teach the washer affixed to the curtain fabric with an adhesive. However, Breslow teaches a shower curtain with washers (10,

Fig. 1) fastened with adhesive (Col. 1, lines 68 – 72; “pads can be secured by a layer of thermally sensitive adhesive on the back.”).

Therefore, taking the combined teachings of Yuhara, Yoksza, Lys and Breslow as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the washers with adhesive of Breslow into the method of making LED curtain display system of claim 13 as taught by Yuhara, Yoksza et al. and Lys et al. to obtain a LED curtain system with washers attached to the curtain by adhesive to provide hanger elements which would be securely placed by the adhesive (Col. 1, lines 64 - 72).

Claim 17 recites the limitations that have been covered in claim 15. The examiner finds no particular advantage of having the LED lighting unit being attached to the washer before the washer is attached to the curtain. Therefore, it has been analyzed and rejected w/r to claim 15. With respect to the washer being pre-affixed to the LED lighting unit.

**8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuhara (US 6,362,801 B1) in view of Breslow (US 3,118,207) and further in view of Gimbutas et al. (US 5,066,085)**

Re claim 6, Yuhara and Breslow as a whole teaches the LED curtain display system of claim 5, but fails to explicitly disclose the adhesive which is a styrene-based clear adhesive. However, Gimbutas et al. discloses a styrene-based clear adhesive used to attach fiber optic strands.

Therefore, taking the combined teachings of Yuhara, Breslow. and Gimbutas et al. as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the styrene-based clear adhesive as taught by Gimbutas et al. into the LED curtain display system of claim 5 as taught by Yuhara and Breslow to obtain a fiber optic curtain with LED's and washers secured by the adhesive to be used as a backdrop for a theatrical event (Col. 1, lines 14 – 17).

Re claim 7, Yuhara and Breslow as a whole teaches the LED curtain display system of claim 5, but fails to disclose the rear face of the washer which is adhesively attached to a housing of an LED lighting unit. However Gimbutas et al. disclose a fiber optic curtain wherein the strands are adhesively attached through the curtain (Fig. 9) thereby being attached to the back side of the curtain.

Therefore, taking the combined teachings of Yuhara, Breslow. and Gimbutas et al. as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the fiber optic curtain as taught by Gimbutas et al. into the LED curtain display system of claim 5 as taught by Yuhara and Breslow to obtain a fiber optic curtain with LED's wherein the fiber optic strands are adhesively attached to the rear face of the washer to be used as a backdrop for a theatrical event (Col. 1, lines 14 – 17).

**9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over combined teachings of Yuhara (US 6,362,801 B1), Yoksza et al. (US 5,410,328), and Lys et al. (US 6,528,954), Breslow (US 3,118,207), in view of Gimbutas et al. (US 5,066,085).**

Re claim 16, the combined teachings of Yuhara, Yoksza, Lys et al., and Breslow as a whole teach the method of claim 13, but fails to teach LED lighting unit that has a housing and said housing affixed to a respective washer with an adhesive. However Gimbutas et al. disclose a fiber optic curtain wherein the strands are adhesively attached though the curtain (Fig. 9) thereby being attached to the back side of the curtain.

Therefore, taking the combined teachings of Yuhara, Yoksza, Lys et al, Breslow, and Gimbutas et al. as a whole, it would have been obvious to a person having ordinary skill in the art to incorporate the fiber optic curtain as taught by Gimbutas et al. into the method of making LED curtain display system of claim 13 as taught by Yuhara, Yoksza et al., Lys et al and Breslow to obtain a fiber optic curtain with LED's wherein the fiber optic strands are adhesively attached to the rear face of the washer to be used as a backdrop for a theatrical event (Col. 1, lines 14 – 17).

***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

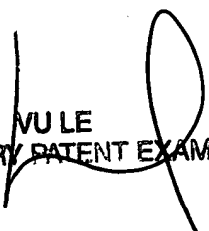
Tokimoto et al. (US 6,690,341 B2) disclose a method and system for displaying high-density bitmapped dot-matrix imaging data on a large-scale lowdensity dot-matrix display.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Sim whose telephone number is (571) 270-1189. The examiner can normally be reached on Monday - Friday (Alternate Fridays off) 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-2000. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YHS

  
WU LE  
SUPERVISORY PATENT EXAMINER